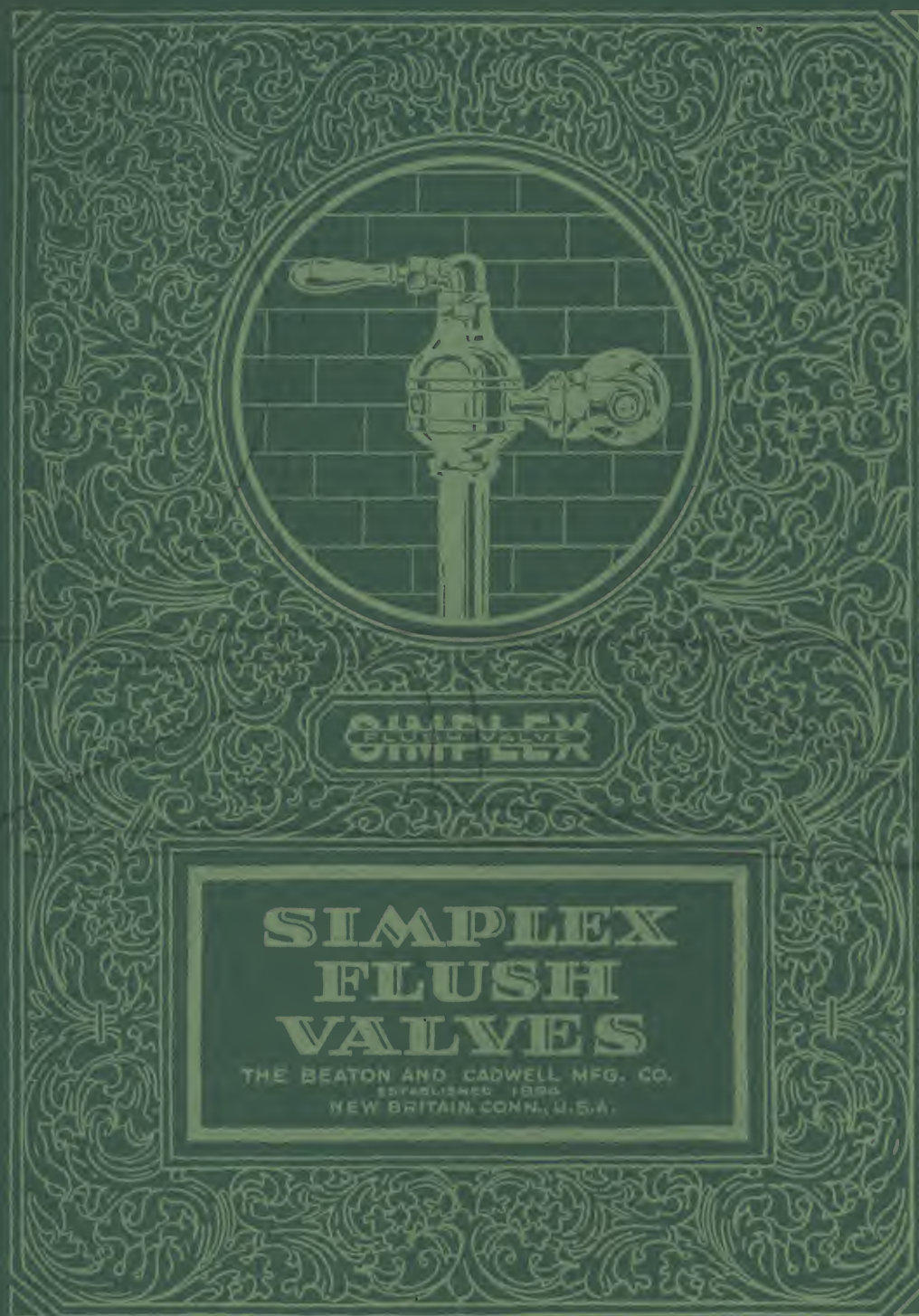




**SIMPLEX
FLUSH
VALVES**

THE BEATON AND CADWELL MFG. CO.
ESTABLISHED 1888
NEW BRITAIN, CONN., U.S.A.

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SIMPLEX FLUSH VALVE

THE following pages illustrate and describe the various styles of Simplex Flush Valves.

Scientifically designed and carefully manufactured to operate with the least possible effort. A thoroughly dependable valve for residences, hospitals and public buildings.

THE flush valve is rapidly replacing many of the former devices used for flushing various types of fixtures.

Simplex Flush Valves are used more generally because of the following reasons:

Single Flush Type: Regardless of how much oscillating handle or push button is held down or oscillated one metered flush is delivered and valve closes.

Outside By-Pass Control: The time plug arrangement allows valves to be adjusted from the outside of valve (when necessary). All valves are regulated at the factory for the usual conditions.

Handle can be moved around into any position and locked. Push button is on top of valve, making these two types of valves fit practically every installation.

The Simplex Flush Valve is made throughout with best material and workmanship that is possible to secure.

We guarantee the Simplex Flush Valve when properly installed to give perfect satisfaction; we will exchange any valves or parts that prove defective from actual wear within five years from date of installation.

THE BEATON & CADWELL MFG. CO.

Established 1894

New Britain, Connecticut, U. S. A.

Operation: The Simplex Flush Valve is easy to operate as there is no resistance to overcome; a child or invalid may operate it with ease.

The Simplex Flush Valve has a tapered outlet which allows water to be delivered to fixture with greater flushing power, thereby saving water; this is particularly advantageous when used in low water pressure districts.

The Simplex Flush Valve may be installed and operated satisfactorily with any standard bowl or fixture that has been approved by Bureau of Standards, where there is volume of water sufficient to flush bowl without valve or tank.

Adjustment: The outside by-pass is particularly advantageous, as there are no two conditions exactly alike (water pressures and fixtures vary). After valve is installed it is very simple to adjust to each individual requirement, without taking valve apart. This adjustment may be made permanent by means of lock washer. We furnish wrench with each valve to make adjustment. The by-pass is so constructed that there are four different channels. If foreign matter accumulates in one of these it is possible to turn plug to one of the other three in which case the accumulation should be washed out without taking valve apart.

By shutting off water at stop the by-pass can be taken out and any stoppage removed from by-pass without taking valve apart.

Finish: Unless otherwise specified all valves except concealed type will be furnished nickel-plated. Exposed parts of concealed valves are nickel-plated.

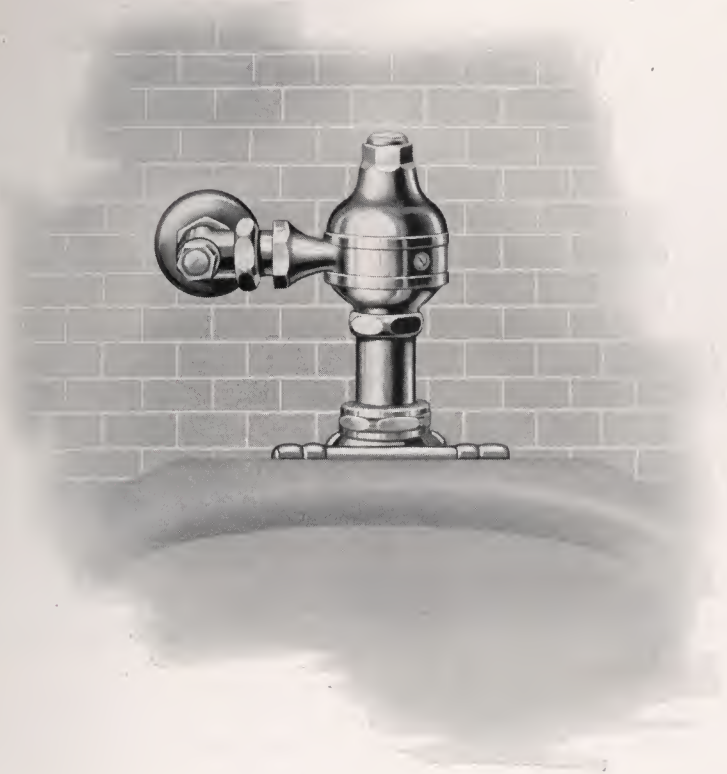
Rough Brass Simplex Valves can be furnished for factory or other similar installations where a high finished valve is not required, at slightly lower prices.

Chromium Plated Simplex Valves can be furnished at higher prices. This finish is especially recommended for long life; resists tarnish and corrosion indefinitely. No polishing required on Chromium Plated Simplex Flush Valves.

White Metal Simplex Flush Valves can be furnished at higher prices.

All special finishes: Prices quoted on application.

Minimum roughing-in measurements are to be found on the following pages covering different types of bowls and installations. They may be changed to conform with different requirements.



It is possible to equip Simplex Flush Valves with any of the combinations below. Specify **S10** with letter giving style required.

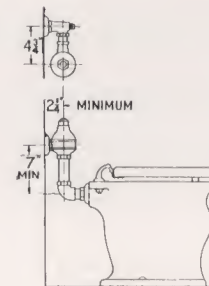
- D** With 1" straight instead of angle stop as shown. (See Page 5) No Extra
- E** Slip joint elbow for either 1 1/4" or 1 1/2" back or side spud closet. Extra **\$1.50** List
- MB** Metal button instead of porcelain. No Extra
- O** With 2" x 1 1/2" spud reducer. Extra **\$1.00** List
- X** Bumper on angle stop. No Extra
- Y** Valve bumper (fitting over top of valve) for seat with cover. Extra **.75** List
- Z** Wall bumper (made with wood screw or toggle bolt to fasten to wall.) Extra **.75** List

Style **S10 A** List Price **\$23.00** Each

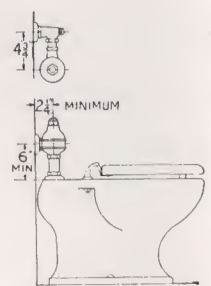
Complete nickel-plated Simplex Flush Valve with porcelain push button, 1" angle stop, 1 1/4" nickel-plated flush pipe and flanges.

Style **S10 AR** List Price **\$23.00** Each

Complete nickel-plated Simplex Flush Valve with porcelain push button, 1" angle stop, 1 1/2" nickel-plated flush pipe and flanges.



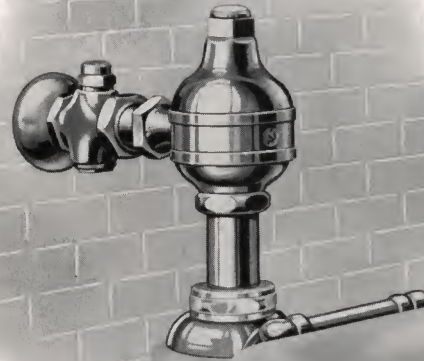
Style **S10AE**
1 1/4" Flush Connection
Style **S10AER**
1 1/2" Flush Connection



Style **S10A**
1 1/4" Flush Connection
Style **S10AR**
1 1/2" Flush Connection

It is possible to equip Simplex Flush Valves with any of the combinations below. Specify S10 with the letter giving the style required.

- A With 1" angle instead of straight stop as shown. (See Page 4) No Extra
- E Slip joint elbow for either 1 1/4" or 1 1/2" back or side spud closet. Extra \$1.50 List
- M B Metal button instead of porcelain. No Extra
- O With 2"x1 1/2" spud reducer. Extra \$1.00 List
- X Bumper on Angle Stop. No Extra
- Y Valve bumper (fitting over top of valve) for seat with cover. Extra 75c. List
- Z Wall bumper (made with wood screw or toggle bolt to fasten to wall) Extra 75c. List

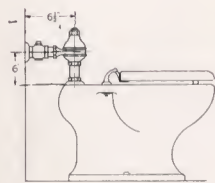


Style S10 D List Price **\$23.00** Each

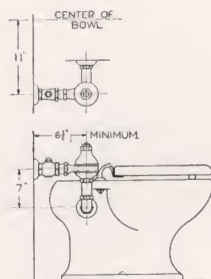
Complete nickel-plated Simplex Flush Valve with porcelain push button, 1" straight stop, 1 1/4" nickel-plated flush pipe and flanges.

Style S10 DR List Price **\$23.00** Each

Complete nickel-plated Simplex Flush Valve with porcelain push button, 1" straight stop, 1 1/2" nickel-plated flush pipe and flanges.



Style **S10D**
1 1/4" Flush Connection
Style **S10DR**
1 1/2" Flush Connection



Style **S10DE**
1 1/4" Flush Connection
Style **S10DER**
1 1/2" Flush Connection



It is possible to equip Simplex Flush Valves, oscillating handle type, with any of the combinations below. Specify **S10H** with the letter giving the style required.

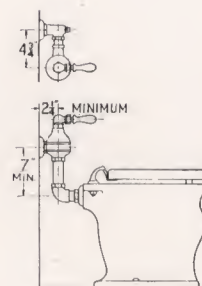
- D** With 1" straight instead of angle stop, as shown. No Extra
- E** Slip joint elbow for 1 1/4" or 1 1/2" back or side spud closet. Extra \$1.50 List
- MH** Metal oscillating handle instead of porcelain. No Extra
- O** With 2" x 1 1/2" spud reducer. Extra \$1.00 List
- X** Bumper on angle stop. No extra
- Y** Valve bumper (fitting over top of valve) for seat with cover. Extra 75c. List
- Z** Wall bumper (made with wood screw or toggle bolt to fasten to wall).

Style S10 HA List Price \$23.00 Each

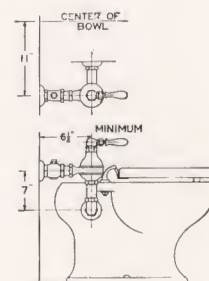
Complete nickel-plated Simplex Flush Valve with porcelain oscillating handle, 1" angle stop, 1 1/4" nickel-plated flush pipe and flanges.

Style S10 HAR List Price \$23.00 Each

Complete nickel-plated Simplex Flush Valve with porcelain oscillating handle, 1" angle stop, 1 1/2" nickel-plated flush pipe and flanges.



Style **S10HEA**
1 1/4" Flush Connection
Style **S10HEAR**
1 1/2" Flush Connection



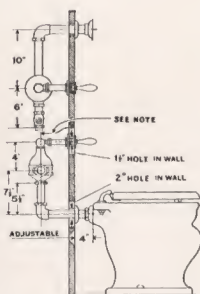
Style **S10HDE**
1 1/4" Flush Connection
Style **S10HDER**
1 1/2" Flush Connection

It is possible to equip concealed Simplex Flush Valves with any of the combinations given below. Specify **S10C** with letter giving style required.

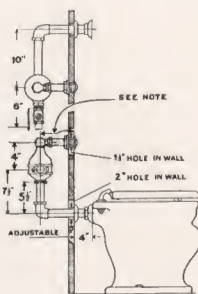
- A** With 1" angle stop instead of straight stop as shown. No Extra
- B** With Porcelain button instead of oscillating handle. No Extra
- MB** With metal button instead of porcelain. No Extra
- MH** With metal oscillating handle instead of porcelain. No Extra
- O** With 2"x1 1/2" spud reducer. Extra \$1.00 List
- Z** Wall bumper (made with wood screw or toggle bolt to fasten to wall). Extra 75c. Each List

When wall is more than one inch in thickness add to list price as follows: 1" to 2" 60c. and 30c. for each additional inch in thickness.

NOTE—Orders must definitely state thickness of wall (if replacement state distance from face of finished wall to center of supply as well as thickness of wall). Standard roughing-in measurements are 3 3/4" from center of valve to face of wall. Add to 3 3/4" any additional thickness of wall over 1".



Style **S10CDEEH**
1 1/4" Flush Connection
Style **S10CDEEHR**
1 1/2" Flush Connection



Style **S10CDEEB**
1 1/4" Flush Connection
Style **S10CDEEBR**
1 1/2" Flush Connection



Style **S10 CDEEH** List Price \$26.00 Each

Complete concealed rough brass Simplex Flush Valve 1" straight stop, 1-1 1/4" rough brass slip joint elbow—1-1 1/4" nickel-plated slip joint elbow. Nickel-plated flanges and porcelain oscillating handle, suitable for wall 1" thick.

Style **S10CDEEHR** List Price \$26.00 Each

Same as above except with 1 1/2" flush connections.

Style **S10 CDEJB** List Price \$25.00 Each

Concealed valve same as above but with one elbow; with porcelain push button on center line of bowl 22 1/2" above center of spud.

PARTIAL LIST OF INSTALLATIONS

Eastman Kodak Co. Kodak Park, Rochester, N. Y.	Adelphi Street Apartments Brooklyn, N. Y.
Doubleday Page Garden City, L. I.	Crampton Hall Apartment Brooklyn, N. Y.
New Britain Public Schools New Britain, Conn.	Waterman Fountain Pen Co. New York, N. Y.
Waterbury Public Schools Waterbury, Conn.	Ansonia Farrell Foundry Co. Ansonia, Conn.
Buffalo Public Schools Buffalo, N. Y.	Galeton School Galeton, Pa.
Hotel Utica, Utica, N. Y. New Addition	Colgate University Hamilton, N. Y.
International Silver Co. Meriden, Conn.	Edgewood Apartments Baltimore, Md.
American Hardware Co. New Britain, Conn.	Municipal Building Baltimore, Md.
Hartford Public Schools Hartford, Conn.	Shapiro Apartments Washington, D. C.
Conn. General Insurance Co. Hartford, Conn.	New York State Hospitals Buffalo, Gowanda, Rochester, Utica
Grey Nuns Orphanage Montreal, Que.	Niagara County Jail Lockport, N. Y.
Rochester Telephone Corp. Rochester, N. Y.	University of Buffalo Buffalo, N. Y.
Military Academy Newburgh, N. Y.	Bennett School Millbrook, N. Y.
Westinghouse Mfg. Co. Springfield, Mass.	Pratt & Whitney Mfg. Co. Hartford, Conn.
Y. M. C. A. Buffalo, N. Y.	Providence Gas Co. Providence, R. I.
Royal Typewriter Co. Hartford, Conn.	Odd Fellows Bldg. Foxboro, Mass.
Hotel Elton (Partial Instal.) Waterbury, Conn.	Hartford Hospital Hartford, Conn.
Comfort Station Niagara Falls, N. Y.	U. S. Veterans Hospital North Chicago, Ill.
New York Rapid Transit Co. New York, N. Y.	U. S. Veterans Hospital Augusta, Ga.

PARTIAL LIST OF INSTALLATIONS

Colt's Fire Arms
Hartford, Conn.

Hotel Belmont
Springfield, Mass.

Abrasive Co.
Bridenburg, Phila., Pa.

Lux Clock Co.
Waterbury, Conn.

Sargent Co.
New Haven, Conn.

Criterion Apartments
East Orange, N. J.

Medulla School
Medulla, Fla.

A. & P. Offices & Warehouse
New Haven, Conn.

Butler Theater
Butler, N. J.

South Orange Fire Headquarters
South Orange, N. J.

Pine Brook Hotel
Pinebrook, N. J.

Nassau Hotel
Long Beach, L. I., N. Y.

Commonwealth of Mass. State Infirmary
Danvers Hospital Tewksbury, Mass.

Sandwich School
Sandwich, Mass.

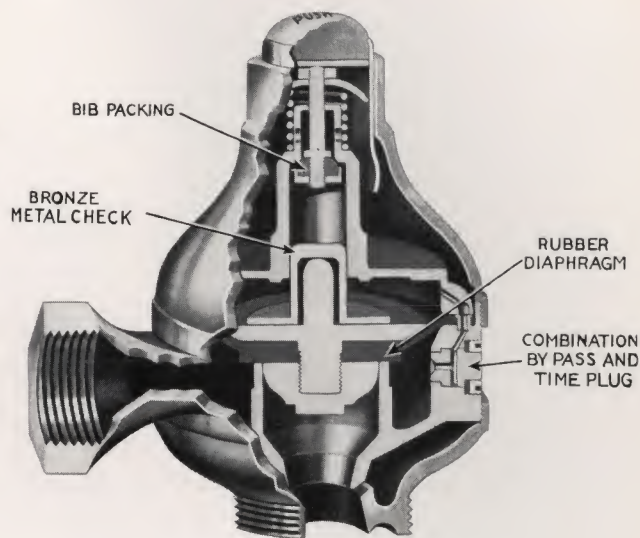
Mechanics Nat. Bank
Worcester, Mass.

Calvin Coolidge School
Schrewsbury, Mass.

City Public School
High Point, N. C.

Montgomery Ave. School
Atlantic City, N. J.

Newton Memorial Hospital
Buffalo, N. Y.



Sectional View Showing Working Parts

Commercial Trust Company
New Britain, Conn.

Exchange Bank
Tallahassee, Florida

Benj. Franklin School
Tampa, Florida

Ford Motor Company
Winter Haven, Florida

Foxboro High School
Foxboro, Mass.

American Exchange Bank Bldg.
Greensboro, N. C.

Charlotte Co. Court House and Jail
Punta Gorda, Florida

Titusville Senior High School
Titusville, Florida

Blake Memorial Methodist Church
Tampa, Florida

Harris County Court House
Houston, Texas

Milby Hotel
Houston, Texas



Style S10 SA List Price **\$55.00**

Complete nickel-plated Simplex Flush Valve, seat action, 1" angle stop, 1 1/4" nickel-plated flush pipe and flanges, also check hinge and approved open front and back seat for regular round front bowl.

Style S10 SAR List Price **\$55.00**

Complete nickel-plated Simplex Flush Valve, seat action, 1" angle stop, 1 1/2" nickel-plated flush pipe and flanges, also check hinge and approved open front and back seat for regular round front bowl.

NOTE—Order must state distance from center of seat post holes to center of spud.

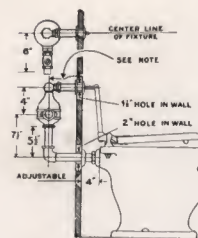
It is possible to equip Simplex Flush Valves with any of the combinations given below, specify **S10 S** with letter giving style required:

- D With 1" straight stop instead of angle stop.
No Extra
- E Slip joint elbow for either 1 1/4" or 1 1/2" back spud closet.
Extra **\$1.50** List
(When elbow is used with seat action valve it is necessary that distance be given from face of brass spud to center of seat post holes.)
- O With 2"x1 1/2" spud reducer. Extra **\$1.00** List
- K Open front and back seat, for extended lip bowl.
Extra **\$1.00** List
- C Concealed type, rough brass valve. (For wall 1" thick.)
Extra **\$2.50** List
- G For raised rear vent bowls. Extra **\$1.00** List
Specify elevation from seat post holes to top of spud, distance between center of spud and seat post holes, also distance between top of spud to center of supply.

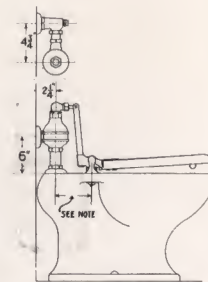
When wall is more than one inch in thickness add to list price as follows; 1" to 2" 60c. and 30c. for each additional inch in thickness.

NOTE—Orders for concealed seat action valves must definitely state distance from face of finished wall to center of seat post holes, also to center of supply as well as thickness of wall. Standard roughing-in measurements for wall 1" thick are 3 3/4" from center of valve to face of finished wall. Add to 3 3/4" any additional thickness of wall over 1".

Roughing-in measurements for Direct Stop used with seat action 6 1/2" from face of wall to center of spud.



Style **S10 SCDE**
1 1/4" Flush Connection
Style **S10 SCDE R**
1 1/2" Flush Connection



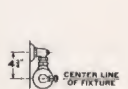
Style **S10 SA**
1 1/4" Flush Connection
Style **S10 SAR**
1 1/2" Flush Connection

It is possible to equip Simplex Flush Valves with any of the combinations below. Specify **S10 Q** with letter giving the style required.

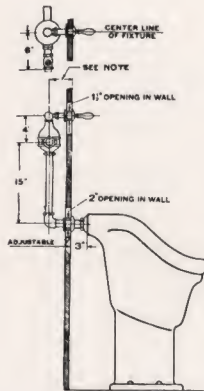
- D** With 1" straight instead of angle stop as shown. No Extra
- E** Slip joint elbow for 1¼" or 1½" back spud urinal. Extra **\$1.50** List
- F** Front push button instead of oscillating handle. No Extra
- M H** Metal oscillating handle instead of porcelain. No Extra
- B** Push button on top of valve instead of oscillating handle. No Extra
- M B** Metal button instead of porcelain. No Extra
- C** Concealed installation, rough brass Simplex Flush Valve, 1" straight or angle stop, 1¼" or 1½" flush tube and elbow, nickel-plated flanges and porcelain oscillating handle suitable for wall 1" thick. Extra **\$1.50** List

When wall is more than one inch in thickness add to list price as follows: 1" to 2" 60c. and 30c. for each additional inch in thickness.

NOTE—Orders for concealed valves must definitely state distance from face of finished wall to center of supply as well as thickness of wall. Standard roughing-in measurements for wall 1" thick are 3¾" from center of valve to face of finished wall. Add to 3¾" any additional thickness of wall over 1".



Style **S10 QFA**
1¼" Flush Connection
Style **S10 QFAR**
1½" Flush Connection



Style **S10 QCHDE**
1¼" Flush Connection
Style **S10 QCHDER**
1½" Flush Connection

Style **S10 QHA** List Price **\$24.00**

Complete nickel-plated Simplex Flush Valve, 1" angle stop, 1¼" nickel-plated flush pipe 15" long and flanges.

Style **S10 QHAR** List Price **\$24.00**

Complete nickel-plated Simplex Flush Valve, 1" angle stop, 1½" nickel-plated flush pipe 15" long and flanges.

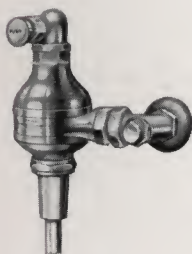
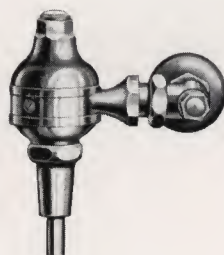


Lever Type
Style **S10 ULN**
List Price **\$23.50**

Complete nickel-plated Simplex Urinal Flush Valve with push lever, $\frac{3}{4}$ " straight stop, $\frac{3}{4}$ " O. D. flush connection and flanges.

Top Push Button
Style **S10 UA**
List Price **\$22.00**

Complete nickel-plated Simplex Urinal Flush Valve with top push button, $\frac{3}{4}$ " angle stop, $\frac{3}{4}$ " O. D. flush connection and flanges.

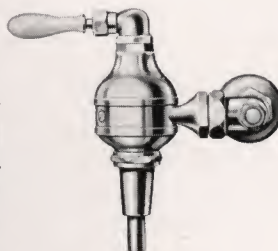


Front Push Button
Style **S10 FUA**
List Price **\$22.00**

Complete nickel-plated Simplex Urinal Flush Valve with front push button, $\frac{3}{4}$ " angle stop, $\frac{3}{4}$ " O. D. flush connection and flanges.

Oscillating Handle Type
Style **S10 HUA**
List Price **\$22.00**

Complete nickel-plated Simplex Urinal Flush Valve with oscillating porcelain handle, $\frac{3}{4}$ " angle stop, $\frac{3}{4}$ " O. D. flush connection and flanges.



All stops are for $\frac{3}{4}$ " I. P. size pipe. If $\frac{1}{2}$ " are required specify accordingly. No extra.

NOTE—Orders for urinal valves must give following information:

Whether syphon jet or wash out type fixture is to be used.
Distance from center of spud to face of wall.

It is possible to equip Simplex Urinal Flush Valves with the following combinations:

Specify **S10 U** with letters giving style required.

A Angle stop instead of straight stop. No Extra

D Straight stop instead of angle stop. No Extra

M B Metal button instead of porcelain.
No Extra

M H Metal handle instead of porcelain.
No Extra

I With $1\frac{1}{4}$ " flush connection instead of $\frac{3}{4}$ ".
No Extra

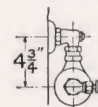
N With 1" flush connection instead of $\frac{3}{4}$ ".
No Extra

T $\frac{1}{2}$ " inlet stop for urinal valves instead of $\frac{3}{4}$ " (specify either angle or straight.) No Extra

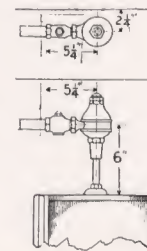
C Concealed rough brass urinal valves, nickel-plated trimmings (for 1" wall).
Extra **\$1.50** List

NOTE—Order for concealed valves must state thickness of wall. See note on Page 11 for additional charge, when wall is more than 1" thick.

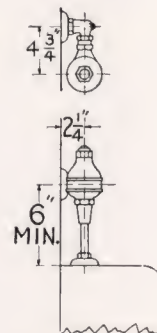
Simplex flush valves may be used on syphon jet type urinals and slop sinks using standard roughing-in measurements as shown on Pages 4-5-6-7-11.



Style **S10 FUA**



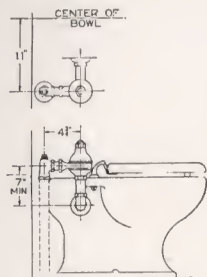
Style **S10 UD**



Style **S10 UA**

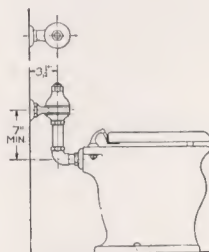
Same roughing-in measurements apply to all types of urinal valves described on this page.

Simplex Flush Valves are also adaptable to various roughing-in measurements given below.



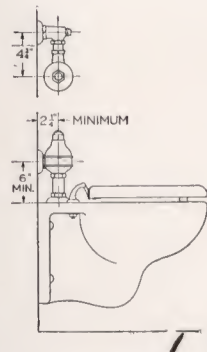
Style **S10 EA**
1 1/4" Flush Connection

Style **S10 EAR**
1 1/2" Flush Connection
List Price **\$24.50** Each



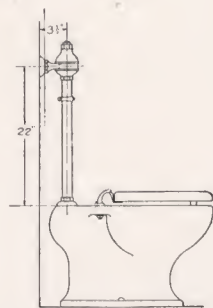
Style **S10 E**
1 1/4" Flush Connection

Style **S10 ER**
1 1/2" Flush Connection
List Price **\$21.50** Each



Style **S10 A**
1 1/4" Flush Connection

Style **S10 AR**
1 1/2" Flush Connection
List Price **\$23.00** Each



Style **S10 J**
1 1/4" Flush Connection

Style **S10 JR**
1 1/2" Flush Connection
List Price **\$22.50** Each

The same dimensions apply regardless of whether valve is oscillating handle or push button.

BUMPER EQUIPMENT



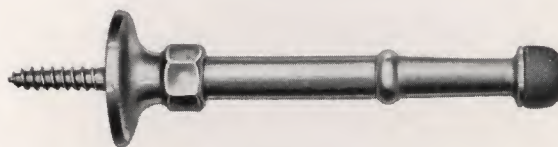
X Bumper

X Bumper fits on to stop, no charge for this type.



Y Bumper

Y Bumper fits over top of Simplex Flush Valve.
List Price \$ **.75** Each



Z Bumper

Standard length 4 1/2" List Price \$ **.75** Each

Z Bumper furnished with wood screw as shown above or with toggle bolt for closed front seats. If open front seat order two bumpers, if toggle bolt type are required state length of bolt required.

TIME PLUG WRENCH



Time plug wrenches are furnished for adjusting valves to various conditions. All valves are tested and adjusted at factory for usual conditions.

Extra wrenches

List Price \$ **.20** Each

INFORMATION FOR ORDERING SIMPLEX FLUSH VALVES

The following is a key to letters used in connection with Simplex Flush Valve:

- A 1" Angle Stop.
- B Button (for operation of regular push button type valve or concealed type).
- C Concealed type.
- D 1" direct or straight stop.
- E Slip joint elbow for 1 1/4" or 1 1/2" spud bowls (specify which is required).
- F Front push button (urinal type).
- G Raised rear vent closet (seat action type).
- H Handle (porcelain, if metal handle is required specify M. H.).
- I 1 1/4" flush connection for urinal valve instead of regular 3/4".
- J To be used when valve is 22 1/2" above fixture (specify either 1 1/4" or 1 1/2").
- K Seat for extended lip bowl (for seat action type).
- L Lever.
- M B Metal push button.
- M H Metal oscillating handle.
- N 1" flush connection for urinal valve instead of regular 3/4".
- O 2"x1 1/2" spud reducer.
- Q Flush tube used on wash down type urinals 15" from center of supply to top of urinal. 1 1/4" size, if 1 1/2" is required specify **QR**.
- R 1 1/2" flush tube or elbow (unless letter **R** is specified tubes and fittings are equipped for 1 1/4" spuds).
- S Seat action.
- T 1/2" inlet stop for urinal valves instead of 3/4" (specify either angle or direct).
- U Urinal valve.
- X Bumper on angle stop.
- Y Valve Bumper (fitting over top of valve).
- Z Wall bumper (made with wood screw or toggle bolt).

When blow out type bowls are to be used it must be definitely stated on your order for valves and the water pressure must be at least 20 lbs. at the bowl.

When ordering valves it is advisable to give working water pressure.

Porcelain (oscillating handle or push button) furnished unless otherwise specified.

Please look the above over after you have made out your order, be sure that you have specified what you will require; this will save time in execution of orders.

The following table represents an approximate compilation of sizes of pipe required for various installations. Changes may be required where unusual conditions as to piping and pressure, etc., are involved.

Minimum Pressure in Pounds at Flush Valve	No. of Valves			
	1" Pipe	1 1/4" Pipe	1 1/2" Pipe	2" Pipe
10	1	1	2	2
20	2	3	8	10
30	2	4	10	15
40	2	5	12	20
50	2	5	15	30
60	2	6	15	40
70	3	7	18	50
80	4	8	20	60

Upon request, information concerning installations under various conditions will be furnished. Such inquiries should be accompanied by the name of job, architect, builder and plumber, also water pressure at street, height of valves above street, length of pipe from street or tank to valve.

SIMPLEX
FLUSH VALVE

THE BEATON & CADWELL MFG. CO.
New Britain, Connecticut, U. S. A.

PRINTED
IN
U.S.A.

ADKINS
NEW BRITAIN, CONN.

VALVES - FLUSH -  OTW 155M

A.I.A. File No. 29H21

